

GERANIUM PLANT NAMED 'SABANI BLUE'

Genus: GERANIUM

Species: *libani x ibericum ssp. jubatum*

Denomination: SABANI BLUE

BACKGROUND TO THE INVENTION

The present invention relates to a new and distinct variety of hardy Geranium grown for use as an ornamental plant for the landscape. The new cultivar is known botanically as *Geranium libani x ibericum subspecies jubatum*, and will be referred to hereinafter by the cultivar name 'SABANI BLUE'.

The inventor has been a student, collector and breeder of Geraniums since 1985. In particular, the inventor has pursued a scientific interest in the botany of Geraniums including the possible relationships between its many species. The inventor's Geranium breeding program has explored these relationships as potential inter-specific crosses. The breeding program has also aimed to create new and interesting and garden-worthy cultivars with unusual combinations of characteristics.

In 1993, the inventor carried out controlled pollination in the inventor's glasshouse in Orkney Island, Scotland, United Kingdom as follows: A plant of the species *Geranium libani* (unpatented) was selected as the intended female parent, and its flowers were emasculated and bagged until receptive. Pollen was transferred from bagged donor flowers taken from plants of the species *Geranium ibericum ssp jubatum* (unpatented) as male parent. The female flowers were re-bagged. Pollination was successful and the harvested seeds were sown in the spring of 1994. The resulting seedlings were grown on and observed and, from these, 'SABANI BLUE' was identified and isolated as a single plant with perceived novel characteristics. 'SABANI BLUE' was

observed during the ensuing years until 1999 when 'SABANI BLUE' was first asexually reproduced by division under the inventor's direction and supervision, since when 'SABANI BLUE' has remained true to type in all successive generations.

5 The new variety, 'SABANI BLUE' is distinguished by its early flowering, its upward-facing flowers, its tolerance of full sun and its tight mounding foliage.

When compared with the female parent, the species *Geranium libani*, 'SABANI BLUE' retains its foliage in summer, whereas plants of *Geranium libani* die down.

When compared with the male parent, *Geranium ibericum ssp. jubatum*, 'SABANI BLUE' is earlier to flower, by approximately three weeks.

10 The closest plant known to the inventor, in vigor and overall appearance, to 'SABANI BLUE' is the species (unpatented) *Geranium x magnificum* (*Geranium ibericum x Geranium platypetalum*). *Geranium x magnificum* is considered to be one of the best and easiest to grow of hardy Geraniums, and has been assigned an Award of Garden Merit by the Royal Horticultural Society of England. 'SABANI BLUE' is three
15 weeks earlier to flower than *Geranium x magnificum*.

SUMMARY OF THE INVENTION

20 In addition to the detailed observations described further herein, the following general traits have been repeatedly observed and represent the distinguishing characteristics of the new plant 'SABANI BLUE'. In combination these traits set 'SABANI BLUE' apart from all other *Geraniums* known to the inventor. 'SABANI BLUE' has not been tested under all possible conditions and phenotypic differences may
25 be observed with variations in environmental, climatic and cultural conditions, however, without any variance in genotype.

1. *Geranium* 'SABANI BLUE' is early flowering.
2. The foliage of *Geranium* 'SABANI BLUE' forms a tight dome or mound which does not die down in the summer.
- 30 3. The flowers of *Geranium* 'SABANI BLUE' are upward facing.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying color drawings illustrate the overall appearance of the new cultivar 'SABANI BLUE' showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the drawings may differ from the color values cited in the detailed botanical description which accurately describe the actual colors of the new variety "SABANI BLUE".

The drawing of 'SABANI BLUE' labeled as Figure 1 depicts a mature plant which is approximately 2 years old from a division and which has been grown in an open border in a garden in Cambridgeshire, United Kingdom.

The drawing labeled as Figure 2 depicts a close-up view of the flower and bud of 'SABANI BLUE'.

Both drawings were made using conventional techniques and although colors may appear different from actual colors due to light reflectance they are as accurate as possible by conventional photography.

BOTANICAL DESCRIPTION OF THE PLANT

The following is a detailed description of the new *Geranium* plant named 'SABANI BLUE'. Data was collected in Cambridgeshire, United Kingdom, from 2 year old plant growing in open border soil. The color determinations are in accordance with the 2001 Edition of the Royal Horticultural Society Colour Chart of the Royal Horticultural Society, London, England, except where general color terms of ordinary dictionary significance are used.

Botanical classification: *Geranium libani x ibericum ssp. jubatum* 'SABANI BLUE'.

Species: *libani x ibericum ssp. jubatum*

Sexuality: Nominally hermaphrodite though some stamens in most flowers are not fully formed; anthers vestigial or absent.

Commercial classification: Hardy perennial.

Common name: Hardy Geranium.

Use: Ornamental for container or garden: best positioned in full sun.

Cultural requirements: Plant in well-drained moderately fertile soil in full sun.

Root system: Thick rootstock with fibrous roots.

- 5 Parentage: *Geranium* 'SABANI BLUE' is an induced hybrid resulting from the controlled pollination of:

Male parent: *Geranium ibericum ssp. jubatum*

Female parent: *Geranium libani*

Plant description:

- 10 Bloom period: Commencing mid to late April and continuing until September.
Lastingness of an individual flower: Approximately 5 – 7 days in spring and fall;
3 – 4 days in summer.
Plant habit: Upright, dense and mounding.
Height: within the range 570mm to 650mm.
- 15 Width: Approximately 700mm.
Hardiness: USDA Zone 6.
Propagation: Propagation is accomplished by division.
Time for a division to establish: If divided in spring, a division with a single eye
will begin to root within 2-3 weeks and will be an established growing plant in 4-
20 6 weeks after division.
Crop time: 3 - 4 months are needed to produce a finished plant in a 1-litre
container.
Pest and Disease Susceptibility or Resistance: None of note.

Stem:

- 25 Basal rooted stem which bears the flowering stems. Basal stem, which carries
basal leaves, is inconspicuous. All stem botanical details are taken from the
flowering stems, apart from the record of the basal leaves.

Flowering stem:

- Overall length: 530mm – 655mm.
- 30 Length to lowest internode: 50mm - 205mm.
Diameter: 2.5mm – 3.5mm.

Basal Leaves:

Shape: Cylindrical.

Stem color: 187A.

Stem surface: Moderately to densely pubescent; hairs eglandular.

- 5 Development of Laterals: At each node, two laterals developed more or less equally. Terminal flower suppressed except at uppermost node.

Basal Leaves:

Shape: Orbicular

- 10 Division: Seven divisions, extending three-fourths of the way towards midpoint; broadest one-fourth of the way towards the tip. Upper divisions 3-lobed.

Apex: Division tips cuspidate

Base: Lowest divisions on either side overlapping.

Venation pattern: Palmate

Vein color (adaxial and abaxial surfaces): Green 137A

- 15 Margins: Deeply crenately toothed.

Attachment: Petiolate

Petioles: Length: 298mm – 393mm

Diameter: 2.5mm - 3.0mm

- 20 Color: 143C but browner, strongly tinged with greyed-purple 184A toward the base.

Pubescence: Moderate to dense, hairs eglandular.

Stipules: Present

Length: 9mm – 15mm

Width: 2mm – 5mm

- 25 Color: Papery, transparent, tinged green along midline.

Arrangement: Rosette

Leaf surface (adaxial surfaces): Weakly rugose; sparsely minutely pubescent, hairs eglandular.

- 30 Leaf surface (abaxial surfaces): Sparsely pubescent, mainly along the ribs, hairs eglandular.

Leaf dimensions:

Length: 105mm – 139mm.

Width: 103mm – 148mm

Leaf color (adaxial surface): 137A but slightly yellower

Leaf color (abaxial surface): 138B but deeper and slightly browner

5 Fragrance: Absent.

Flowers:

Flowering stem: compound cyme with flowers suppressed at lower nodes.

Number of flowers per stem: In the range 18 – 67

10 Inflorescence: Where present at higher nodes, 1 – 2 flowered cymules. All stems
terminate in compound cyme of 4 – 9 flowers.

Bud shape: oval-elliptical

Bud length: 12mm – 13mm

Bud diameter: 5mm – 6mm

15 Bud color: Varies between 139C and 139D, with protruding petal tips violet-blue
N89A.

Peduncle length: On 2-flowered cymules: 59mm – 98mm

Final internode length to terminal cyme: 63mm – 99mm

Peduncle diameter: On 2-flowered cymules: approximately 1mm

Final internode to terminal cyme: 1.5mm – 2.1mm

20 Peduncle color: 145A

Peduncle surface: Moderately to densely pubescent, eglandular (cymules and
compound cyme).

Sexuality: Nominally hermaphrodite though some stamens in most flowers are not
fully formed; anthers vestigial or absent.

25 Flower shape: saucer-shaped

Flower dimensions:

Depth of throat (corolla): 7mm – 9mm

Diameter (corolla): 42mm – 47mm

Persistent or self-cleaning: Corolla self-cleaning.

30 Aspect: Upward to nodding.

Petals: Five in number.

- Petal arrangement: Unfused
- Petal shape: Obcordate with shallow terminal notch
- Petal margin: Entire, weakly waved
- Petal color (adaxial surfaces): Violet N88B but paler with veins nearest purple
- 5 N79B. Basal one-eighth of surface white, N155C but less yellow.
- Petal color (adaxial surfaces): Between Violet N88A and N88B with veins nearest violet 83A. Basal one-eighth of surface between 76B and 76C.
- Petal surfaces: Both smooth.
- Calyx Diameter: 20mm – 22mm
- 10 Calyx height: 3mm – 5mm
- Calyx surface: Sparsely pubescent, mainly along sepal margins, eglandular.
- Calyx color: Sepals green 139D with deeper green midvein and margins tinged with red.
- Sepals: Number: Five
- 15 Sepal shape: Ovate
- Sepal apex shape: strongly mucronate
- Sepal margin: Entire
- Flower fragrance: Absent.
- Reproductive organs:
- 20 Stamens: Number: Ten, although in most flowers some not fully formed, with anthers vestigial or absent. Some flowers with no anthers present.
- Stamen color: See anther and filament below.
- Stamen Dimensions:
- Filament approximately 5mm in length, less than 1mm in width.
- 25 Anther color: Where present, brownish-yellow, too small to match
- Anther shape: Linear.
- Anther dimensions: Approximately 2.5mm in length, less than 1mm in width.
- Color and Quantity of pollen: None observed.
- Pistil: Five, fused
- 30 Pistil color and shape: see stigma, style and ovary below.
- Stigma shape: Strongly reflexed.

Stigma color: Nearest to Greyed-Purple 187D

Stigma dimensions: Approximately 3mm in length; markedly less than 1mm in diameter.

Style shape: Linear

5 Style color: Nearest to Greyed-Purple 187D

Style dimensions: Approximately 5mm in length; less than 1mm in diameter.

Ovary position: Superior

Ovary color: Pale green, too small to match. Densely pubescent.

Ovary shape: Narrow ovate.

10 Ovary dimensions: 2mm. in length and 1.5mm in width.

Seed production:

No seed production has been observed.

15